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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,554	06/16/2001	Ahmad Chini	3927P017	1084

8791 7590 03/25/2004

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EXAMINER

DUONG, DUC T

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 03/25/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,554

Applicant(s)

CHINI ET AL.

Examiner

Duc T. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-25 is/are allowed.
- 6) ☒ Claim(s) 2-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 2-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Moose (U.S. Publishing 2002/0065047 A1).

Regarding to claim 3, Moose discloses a method comprising identifying at least one carrier of a plurality of carriers is in a non-bearing data state (page 4 paragraph 0041 lines 1-4) including receiving information as to which carriers of the plurality of carriers are to be in a non-data bearing state (page 4 paragraph 0041 lines 4-8); selecting the at least one on-data bearing carrier based on the information (page 4 paragraph 0043 lines 1-9) and modulating the at least one non-data bearing carrier with random data (page 2 paragraph 0024 lines 10-11).

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Regarding to claim 2, Moose discloses the at least non-data bearing carrier is a pilot tone (Fig. 1 page 2 paragraph 0024 lines 4-7).

Regarding to claim 4, Moose discloses the at least one non-data bearing carrier is used for a function besides data transmission including channel characterization (page 3 paragraph 0035 lines 19-22).

Regarding to claim 5, Moose discloses the at least one non-data bearing carrier is used for one of synchronization, carrier recovery, and timing recovery (page 4 paragraph 0043 lines 1-2).

Regarding to claim 6, Moose discloses producing the data as a pseudo-random bit stream (page 2 paragraph 0024 lines 10-11).

Regarding to claim 7, Moose discloses the modulating of the at least one non-data bearing carrier is performed in accordance with Orthogonal Frequency Division Multiplexing (page 2 paragraph 0021).

Allowable Subject Matter

3. Claims 8-25 are allowed.

The prior art fails to teach or make obvious the step of or means for "receiving a carrier map from a remotely located system, the carrier map is produced at the system in response to conducting channel estimation analysis on the plurality of carriers to indicate which carriers are unreliable", when the receiving is considered within the specific structure recited in device of claim 8. The prior art fails to teach or make obvious the step of or means for "a multiplexer unit coupled to the feedback link, the multiplexing unit, including input ports and output ports, to receive as input a

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transmission data and a random data and, for each output port, to transmit one of the transmission data and the random data based on information transmitted over the feedback link", when such multiplexer is considered within the specific structure recited in device of claim 10. The prior art fails to teach or make obvious "a first multi-carrier modulation (MCM) system in communication with the network transceiver over a second link, the first MCM system to identify at least one carrier of a plurality of carriers is in a non data bearing state based on feedback information provided by the system and to modulate the at least one non-data bearing carrier with random data", when such multi-carrier modulation system is considered within the specific structure recited in device of claim 19.

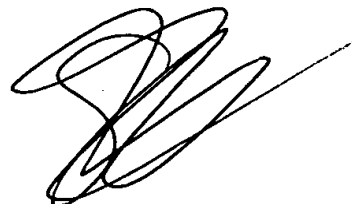
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 703-605-5146. The examiner can normally be reached on M-Th (8:30 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

DD



STEVEN H. D. NGUYEN
PRIMARY EXAMINER